# Transylvania County Comprehensive Transportation Plan (CTP) Meeting #4

NCDOT Transportation Planning Division (TPD)

**Daniel Sellers**, PE

Land of Sky Rural Planning Organization (LOSRPO)

Vicki Eastland









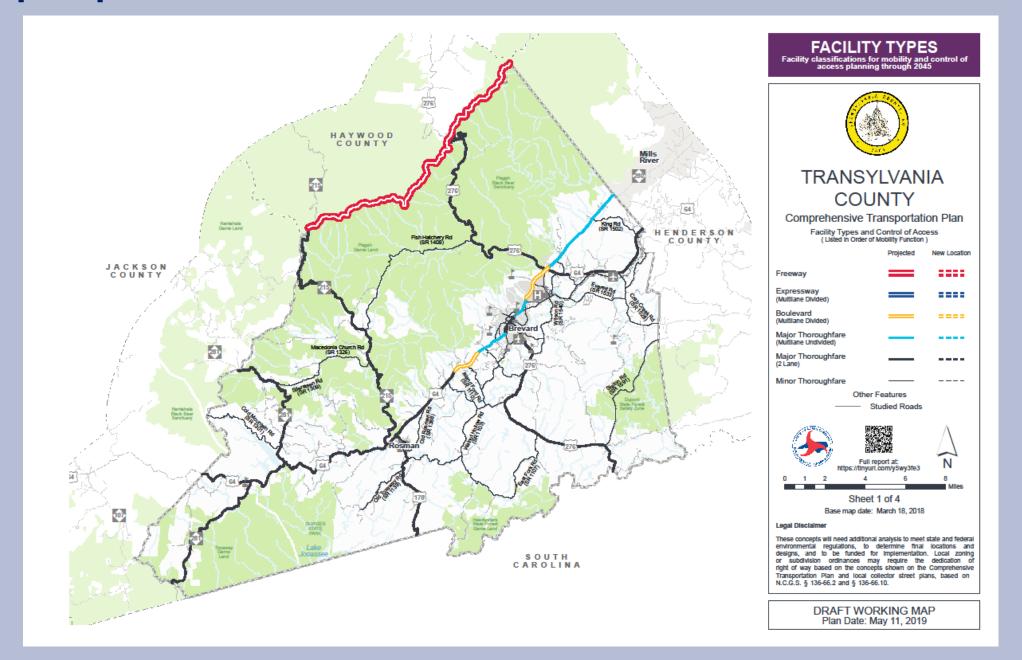
# **Agenda**

- 3:00 PM Welcome and Introductions
- 3:05 PM Brief Group Discussion. Questions from previous meeting
- 3:10 PM Recap of previous materials covered
- 3:25 PM Transportation System Resiliency
- 3:35 PM Review Resiliency maps (mark-up exercise)
- 3:50 PM Seasonal Traffic Projections
- 4:05 PM Volume/Capacity, modernization, existing and proposes projects maps (mark-up exercise)
- 4:25 PM Next meeting Date?
- 4:30 PM Wrap-Up

### **Desired Outcomes**

- New Work Group members are up to speed on process and materials.
- Work Group provides direction on deficiencies and advises project team on additional highway needs including resiliency concerns (via mark-up exercise or comments)
- 3. Work Group provides input on Seasonal Traffic Projections
- 4. Future meeting November?

## Recap of previous materials covered



### What is a CTP?

- Comprehensive Transportation Plan
- Long-range, multi-modal transportation plan
  - 25 to 30 year planning period
  - System Focused Plan
- Incorporates land use plans, community & statewide goals
- Developed cooperatively among local stakeholders, Rural Planning Organization (RPO), and NCDOT

### What is a CTP?

 It strives to anticipate future deficiencies and provide proposals to address each deficiency

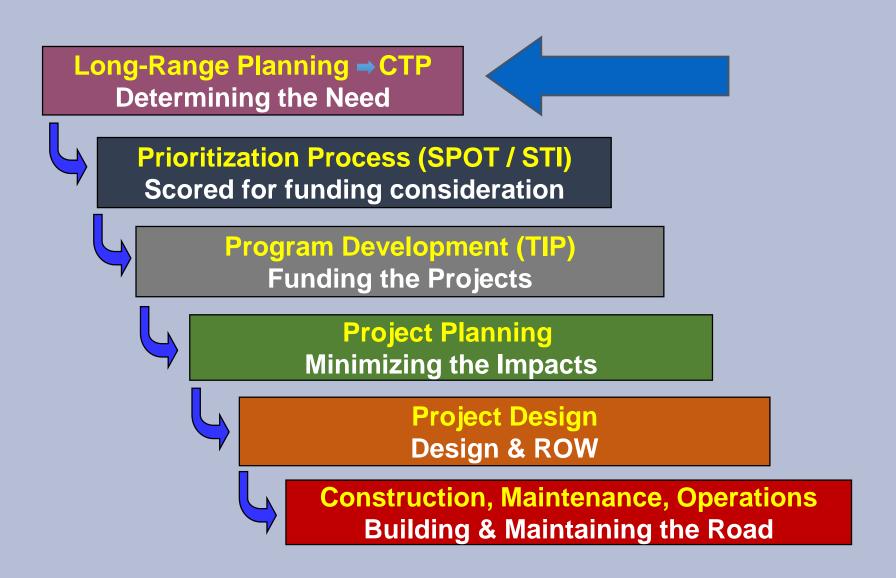
 It gives due consideration to the human and natural environment

 It is accountable to the public through the formal public involvement process

### What is in a CTP?

<ul> <li>Current and Future Conditions</li> <li>Lanes, (number/width)</li> <li>Right-of-Way (ROW)</li> <li>Volume and Capacity</li> </ul>	<ul> <li>Recommendations</li> <li>Existing</li> <li>Needs Improvement</li> <li>Recommended on new location</li> </ul>
<ul> <li>Multimodal Maps</li> <li>Highway</li> <li>Public Transportation and Rail</li> <li>Pedestrian</li> <li>Bicycle</li> </ul>	

### Where does the CTP fit into the "Big Picture"?



### What are the Benefits of a CTP?

- Common, long-range vision for facilities among local governments, RPO, and NCDOT
- Results feed into the prioritization process and help guide the development of projects to be considered for inclusion in State Transportation Improvement Program (STIP)
- It aims for faster project delivery by utilizing project vision,
   environmental constraints, and public outreach in the project delivery
- CTP recommendations are concepts, and any funded project will go through an environmental process before final alignments or designs can be determined

# CTP Work Group Hand Book

- Resource for contact information
- Work Group Roles and responsibilities
- Key Staff Roles
- Preliminary CTP Study Schedule/timeline
- Glossary of Transportation Acronyms

Transylvania County Comprehensive Transportation Plan



### Comprehensive Transportation Plan (CTP) Working Group Handbook





### **Work Group Roles**

- You have a unique local viewpoint...
- During plan development you should provide your perspective and insight...
- Networking/Recruitment; You know others
  with a keen interest in the area's future
  transportation needs; including friends,
  neighbors, business associates...
- Public Meeting support; going forward we may need your help with public meeting support.



www.transylvaniacounty.org/sites/default/files/departments/planning/docs/Appendix-D-Community-Meetings-Report.pdf

### **Key CTP Staff**

### Vicki Eastland, with Land of Sky Rural Planning Organization (LOSRPO)

- Communication and Facilitation
- Data review

### Daniel Sellers, with NCDOT Transportation Planning Division,

- Data gathering and Analysis
- Production of CTP maps and report.

Steve Williams, NCDOT Division 14 Planning Engineer

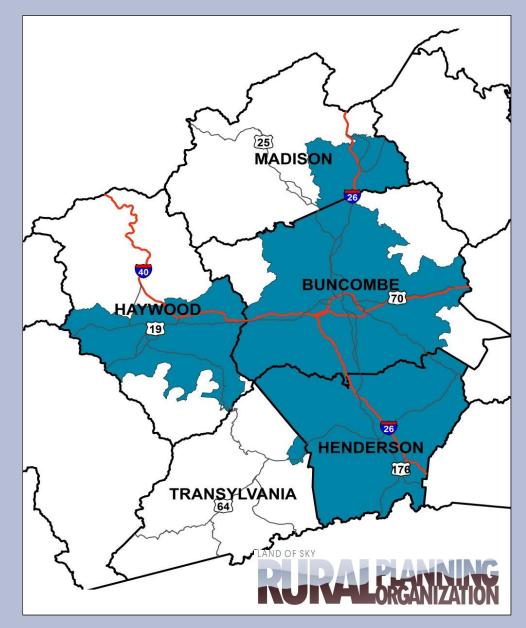
Lonnie Watkins, NCDOT Division 14 District 1 District Engineer

Troy Wilson, NCODT Division 14 Corridor Development Engineer

# Who is Land of Sky RPO

### **Land of Sky RPO**

- •Housed at Land of Sky Regional Council since 2003
- Areas in white on the map
- •Transylvania, Rural areas of Madison, Haywood and Buncombe
- More info at <a href="http://www.landofsky.org/rpo.html">http://www.landofsky.org/rpo.html</a>



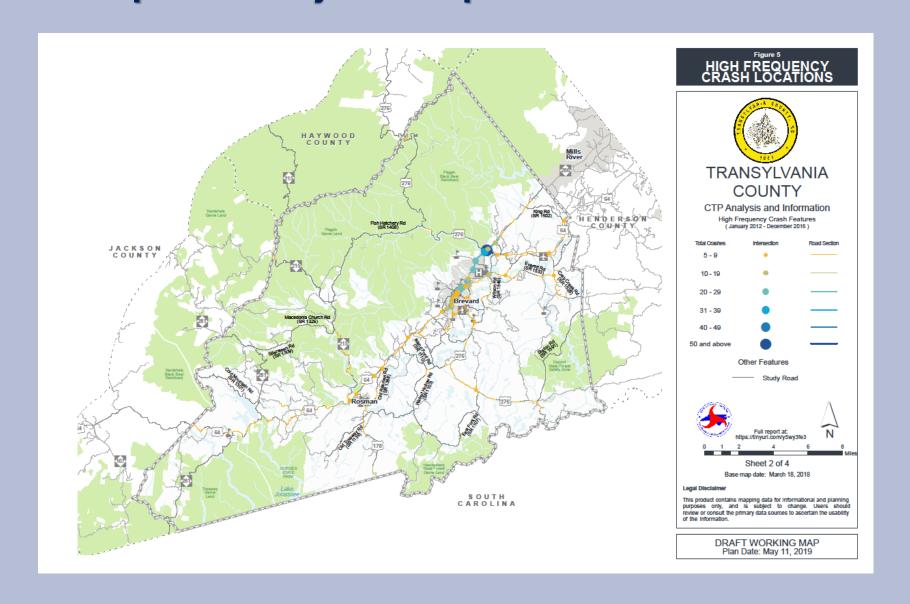
### What does Land of Sky RPO Do?

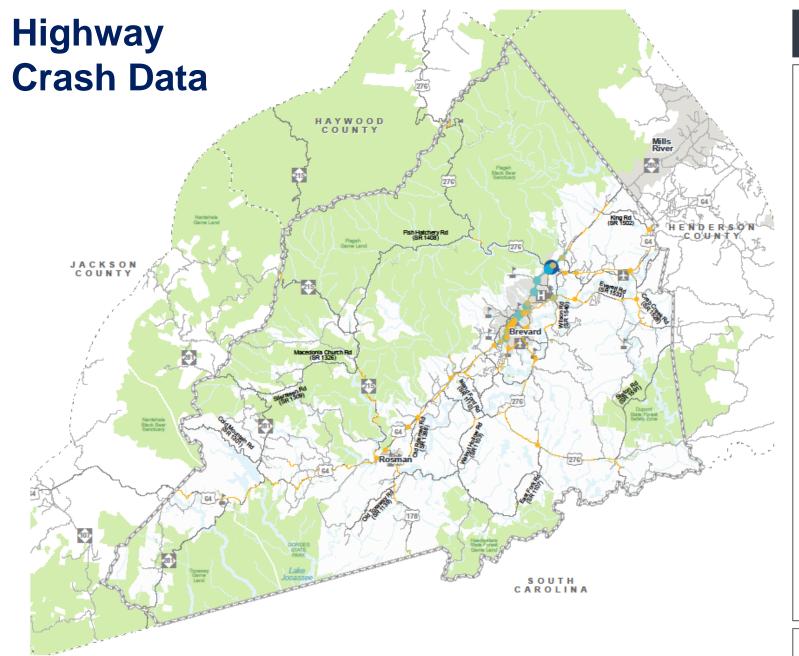
- Provide local officials with transportation related info
- Forum for public input on transportation information
- Preform data gathering and analysis
- Work with our member governments, NCDOT partners
   on the State Transportation Improvement plan (STIP) development,
   AKA SPOT
- Represent RPO areas on project development and Scoping
- Work with NCDOT Transportation Planning Division on Development of CTP's





# Safety, Volume/Capacity, Modernization Deficiencies & Existing and Proposed Projects Map Review



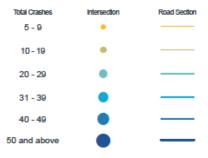


## HIGH FREQUENCY CRASH LOCATIONS



#### CTP Analysis and Information

High Frequency Crash Features ( January 2012 - December 2016 )



#### Other Features

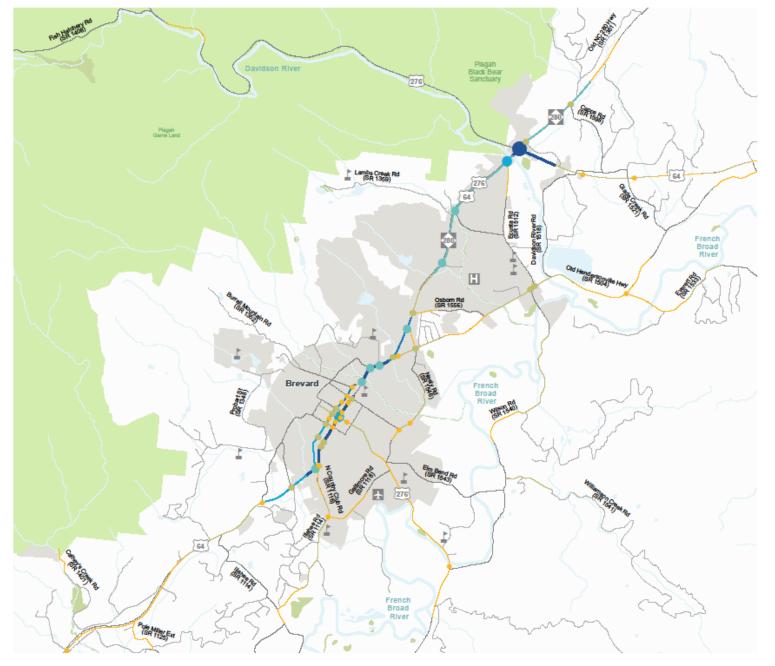
Study Road



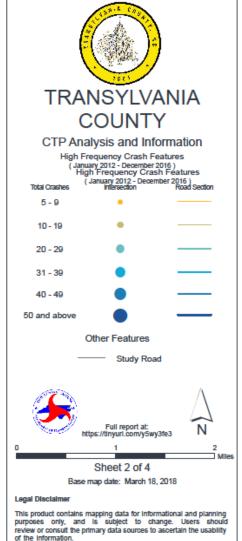
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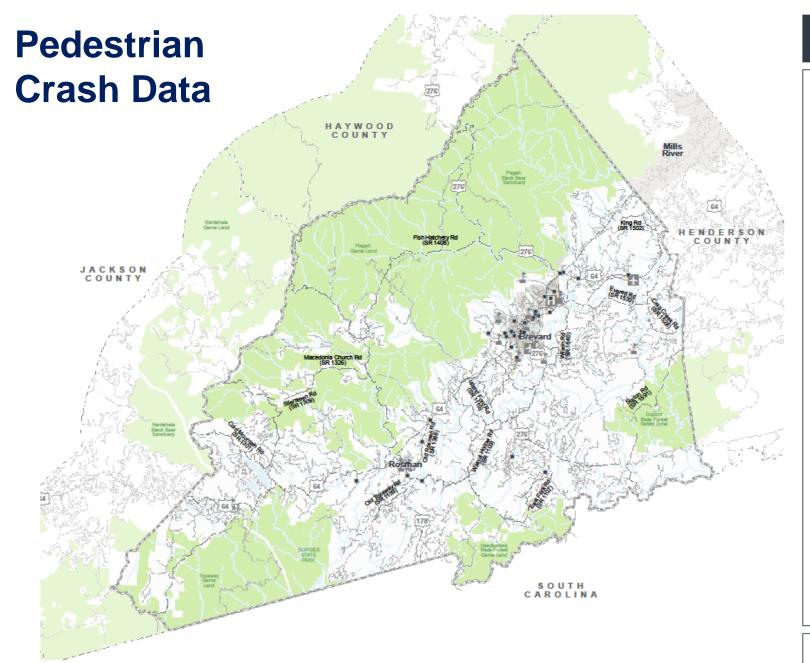
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## HIGH FREQUENCY CRASH LOCATIONS





### Figure 3 Pedestrian Analysis



# TRANSYLVANIA COUNTY

CTP Analysis and Information

Pedestrian Features

Sidewalk

Multi-Use Path

Common Roadway

Bicycle and Pedestrian Bridge

Other Features

Pedestrian Crash Location

>

Destination

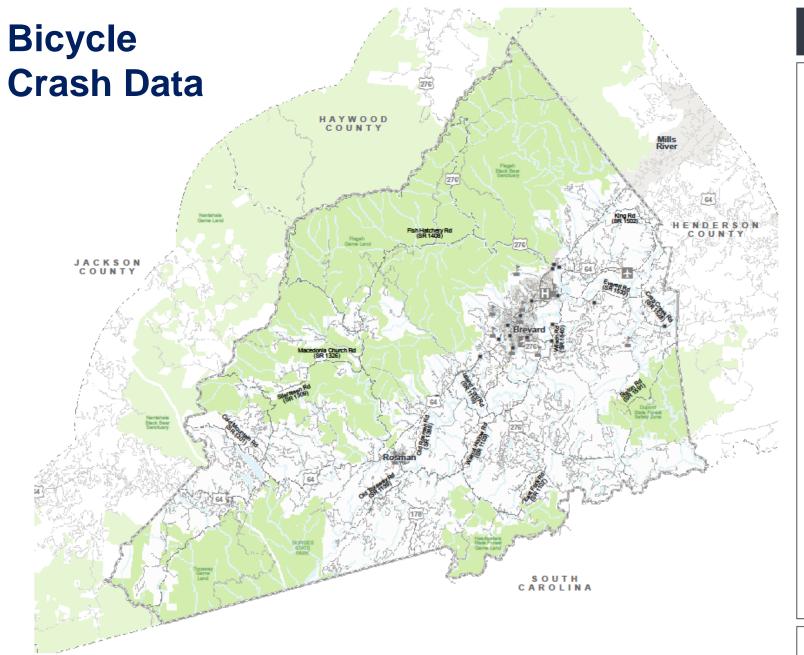
Study Road



Base map date: March 18, 2018

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#### Figure 3 **Bicycle Analysis**



CTP Analysis and Information

Bicycle Features

Bicycle Lane

Bicycle Route

Multi-Use Path

Common Roadway

Bicycle and Pedestrian Bridge

Other Features

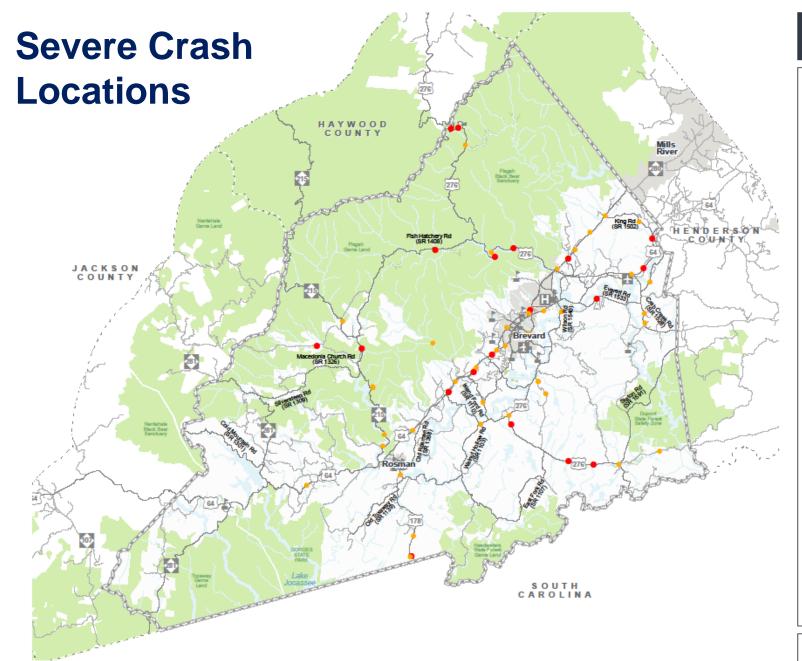
Bicycle Crash Location Destination

Study Road



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### SEVERE CRASH LOCATIONS



CTP Analysis and Information

Severe and Fatal Crash Features (January 2013 - December 2017)

- A (Severe Crash)
- K (Fatal Crash)

Other Features

Study Road

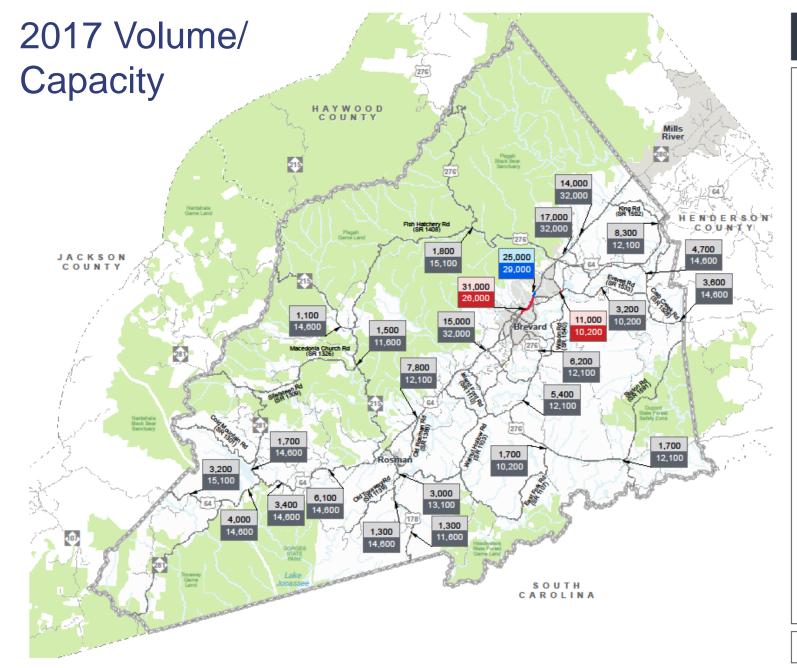


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DRAFT WORKING MAP Plan Date: June 05, 2019



# 2017 VOLUME AND CAPACITY DEFICIENCIES



#### CTP Analysis and Information

Volume and Capacity Ratio Features (Base Year 2017)

2017 Volume 2017 Capacity

Under Capacity (0-0.79)

2017 Volume 2017 Capacity

Near Capacity (0.80-0.99)

2017 Volume 2017 Capacity

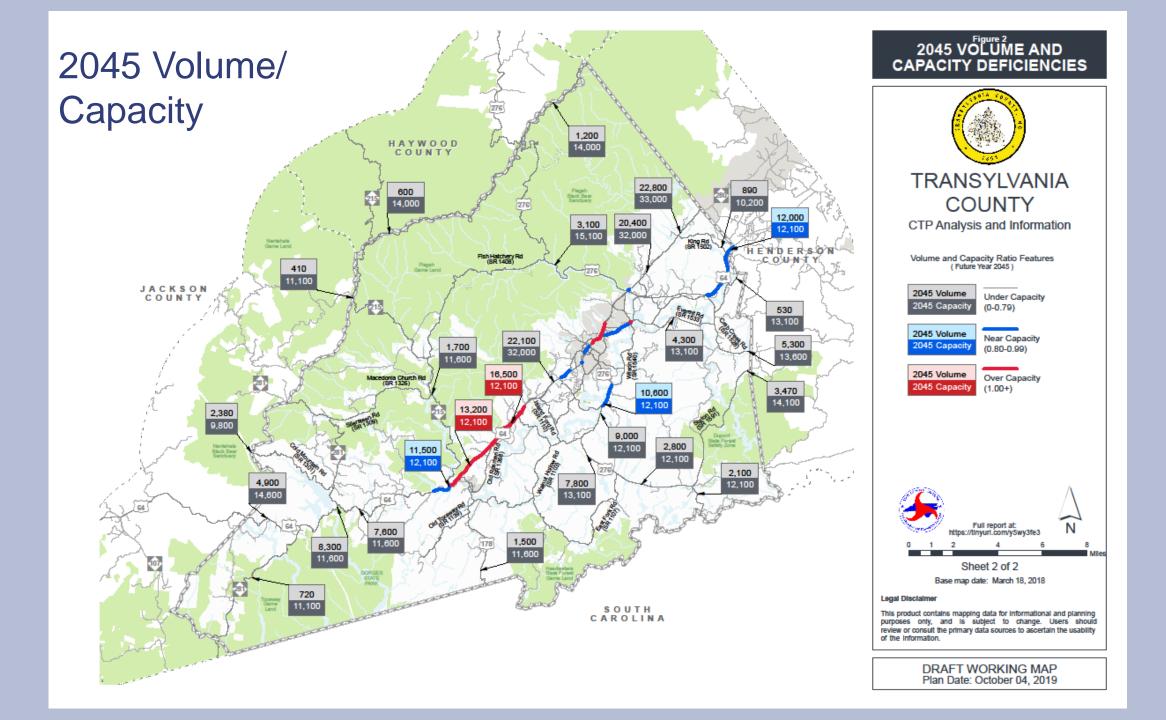
Over Capacity (1.00+)

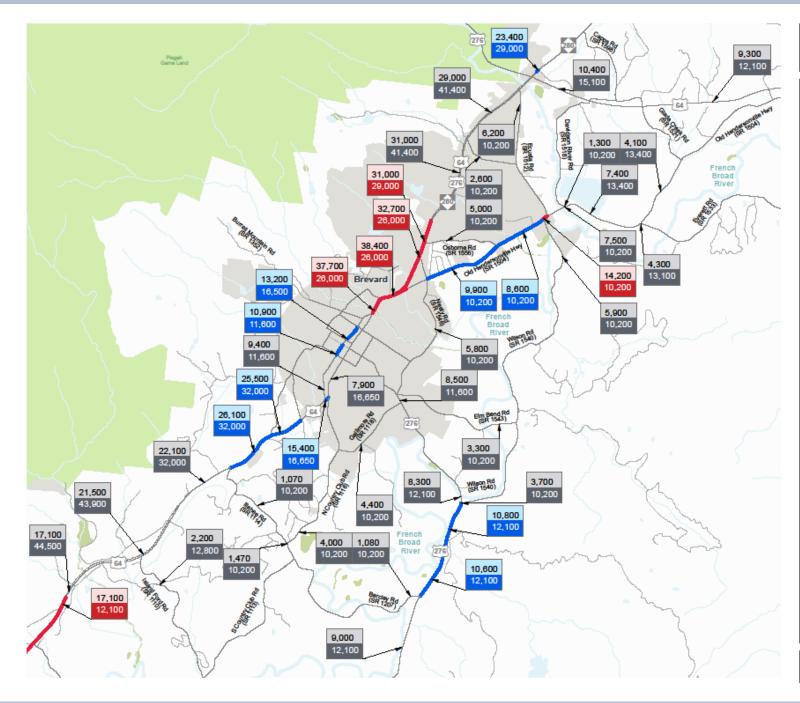


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# 2045 VOLUME AND CAPACITY DEFICIENCIES



### TRANSYLVANIA COUNTY

CTP Analysis and Information

Volume and Capacity Ratio Features (Future Year 2045)

2045 Volume 2045 Capacity

Under Capacity (0-0.79)

2045 Volume 2045 Capacity

Near Capacity (0.80-0.99)

2045 Volume 2045 Capacity

Over Capacity (1.00+)



0.25 0.5

Full report at: https://tinyuri.com/y5wy3fe3



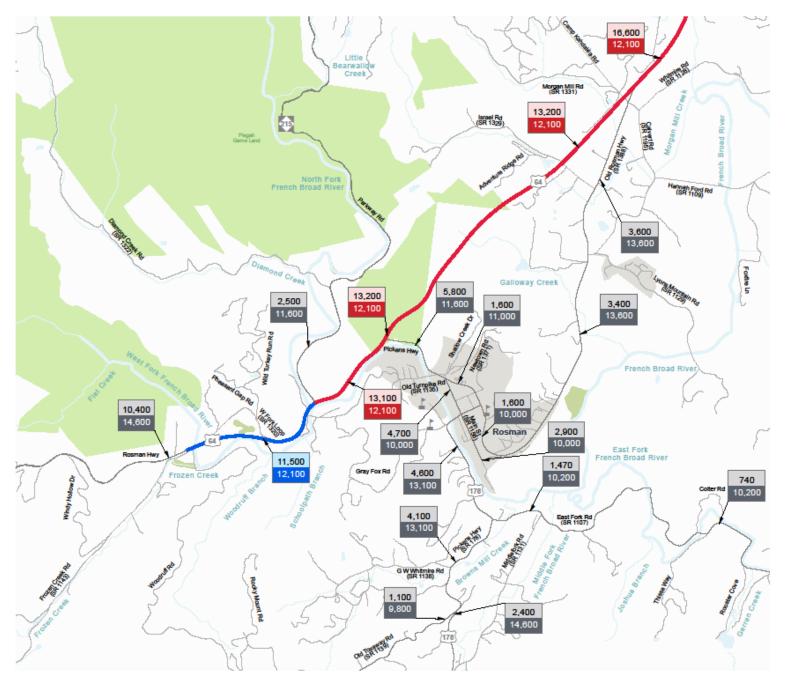
Sheet 2 of 2 Base map date: March 18, 2018

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> DRAFT WORKING MAP Plan Date: October 04, 2019



# 2045 VOLUME AND CAPACITY DEFICIENCIES



### **TRANSYLVANIA** COUNTY

CTP Analysis and Information

Volume and Capacity Ratio Features (Future Year 2045)

2045 Volume 2045 Capacity

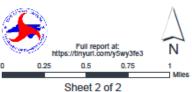
**Under Capacity** (0-0.79)

2045 Volume 2045 Capacity

Near Capacity (0.80 - 0.99)

2045 Volume 2045 Capacity

Over Capacity (1.00+)



Base map date: March 18, 2018

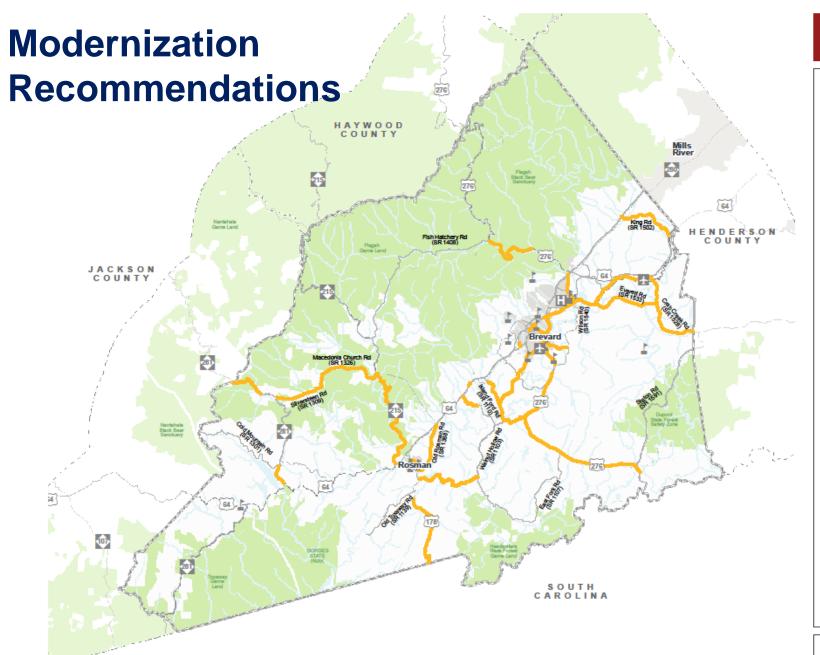
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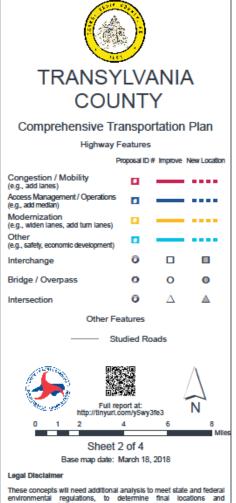
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# **Modernization Table**

FUNCTIONAL CLASSIFICATION	US & NC Routes (Minor Arterial or Collector)	Other Collectors	Routes that are not functionally Classified
Less than 2,000 vpd	10 feet	10 feet	9 feet
2,000 to 5,000 vpd	12 feet	11 feet	10 feet
Over 5,000 vpd	12 feet	12 feet	

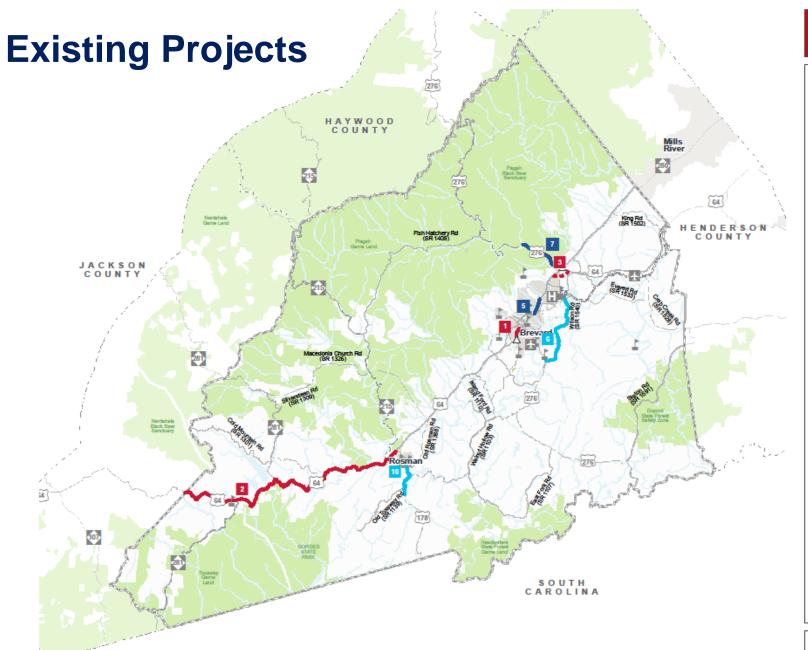






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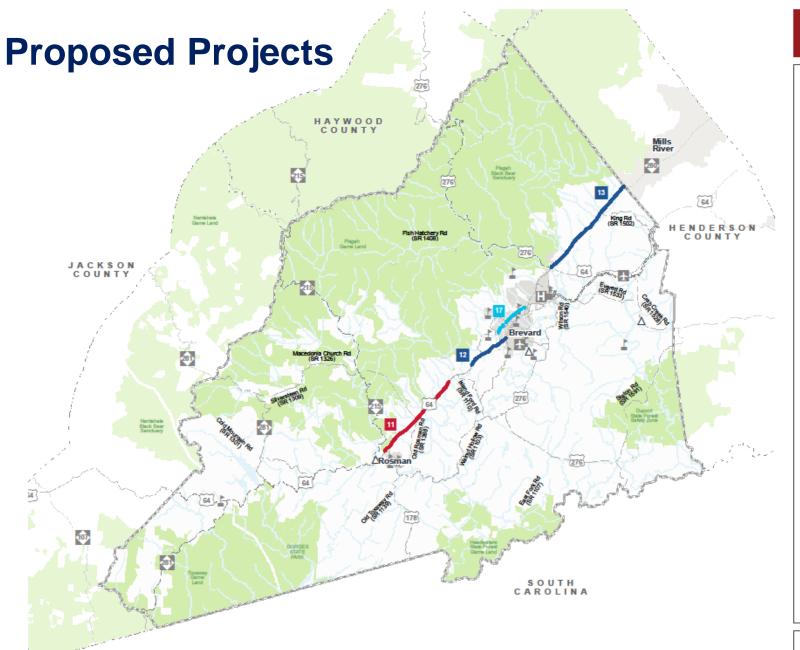




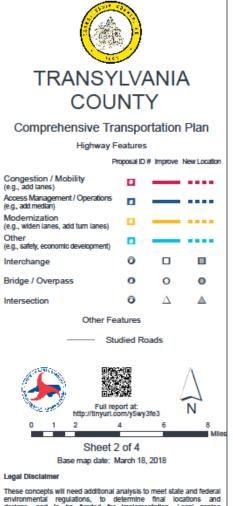


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right of way based on the concepts shown on the Comprehensive Transportation Plan and local collector street plans, based on N.C.G.S. § 136-66.2 and § 136-66.10.

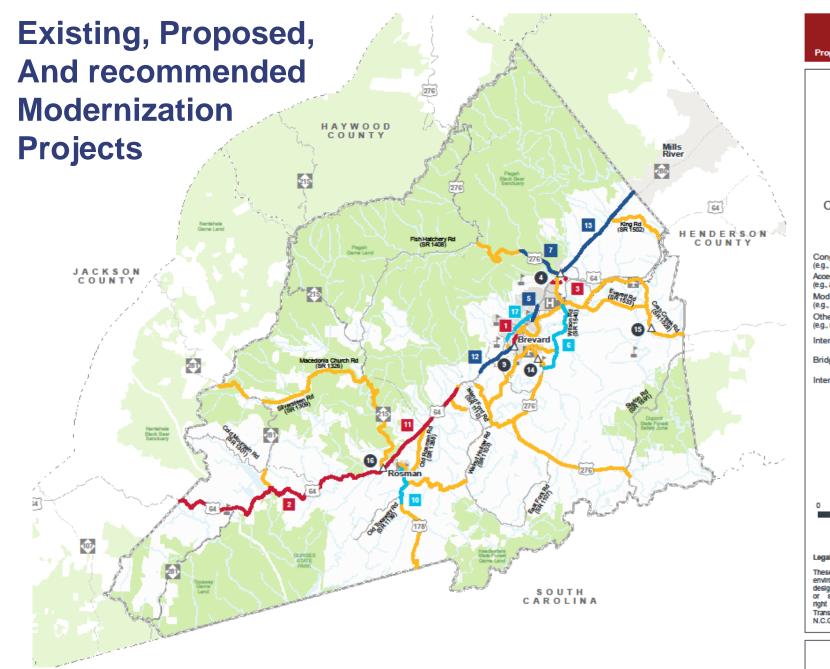






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> DRAFT WORKING MAP Plan Date: June 03, 2019



# HIGHWAY RECOMMENDATIONS Proposals that address identified needs through 2045



#### Comprehensive Transportation Plan

Highway Features

Proposal ID# Improve New Location

Other Features

Studied Roads

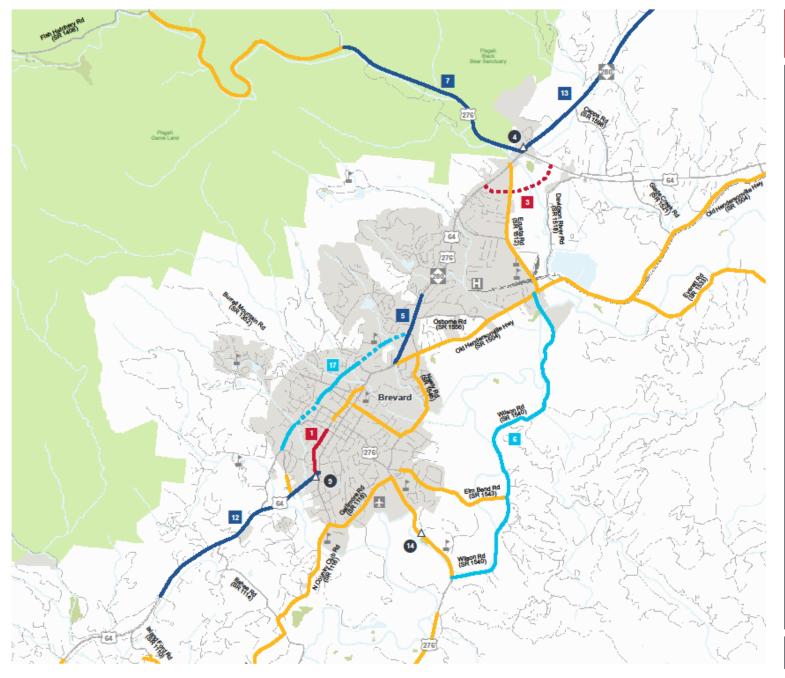


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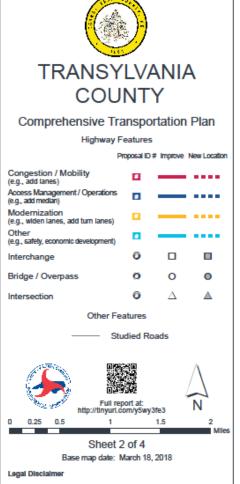
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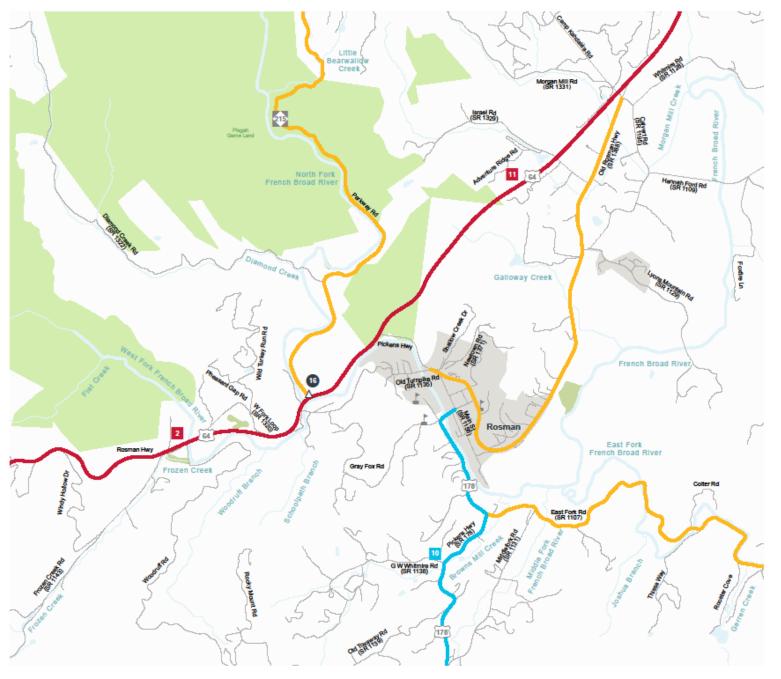


# HIGHWAY RECOMMENDATIONS Proposals that address identified needs through 2045



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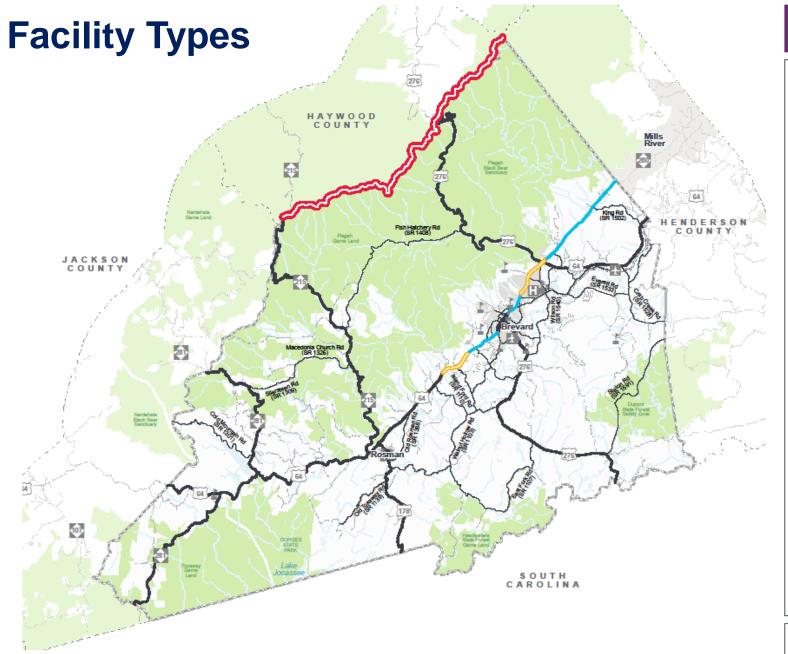


# HIGHWAY RECOMMENDATIONS Proposals that address identified needs through 2045



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### **FACILITY TYPES**

Facility classifications for mobility and control of access planning through 2045



### TRANSYLVANIA COUNTY

#### Comprehensive Transportation Plan

Facility Types and Control of Access (Listed in Order of Mobility Function)

	Projected	New Location	
Freeway		====	
Expressway (Multilane DMded)		====	
Boulevard (Multilane Divided)		====	
Major Thoroughfare (Multilane Undivided)	_		
Major Thoroughfare (2 Lane)	_		
Minor Thoroughfare			
Other Features			
Studied Roads			
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# **Transylvania County Public Transit**



April Alm, Transylvania County Transportation Coordinator June 11, 2019

# Transportation

 Transylvania County Transportation provides demand response – door-to-door transportation services for the residents of Transylvania County.

A demand response system is one where passenger trips are generated by calls from passengers for advanced scheduling and then the transportation system dispatches a vehicle to pick the passengers up and transport them to their destinations.

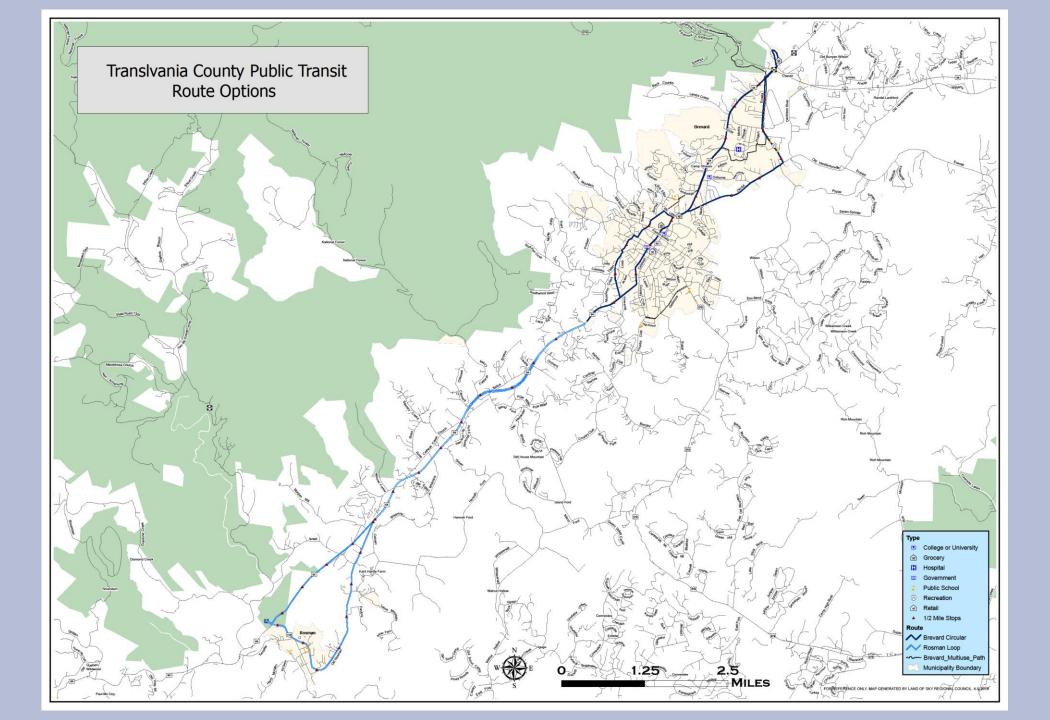
- Examples of transport:
  - General Public (Employment, Shopping, Medical Appts, Paying Bills, etc.)
  - Senior Adults to Silvermont and Quebec Community Center Nutrition Sites
  - Vocational Rehabilitation
  - Head Start
  - Dialysis
  - Sharing House Getting Ahead Programs
  - Schenck Job Corp Student Transport
- Transylvania County Transportation has a fleet of seven (7) vehicles, four of which are lift-equipped paratransit vans.

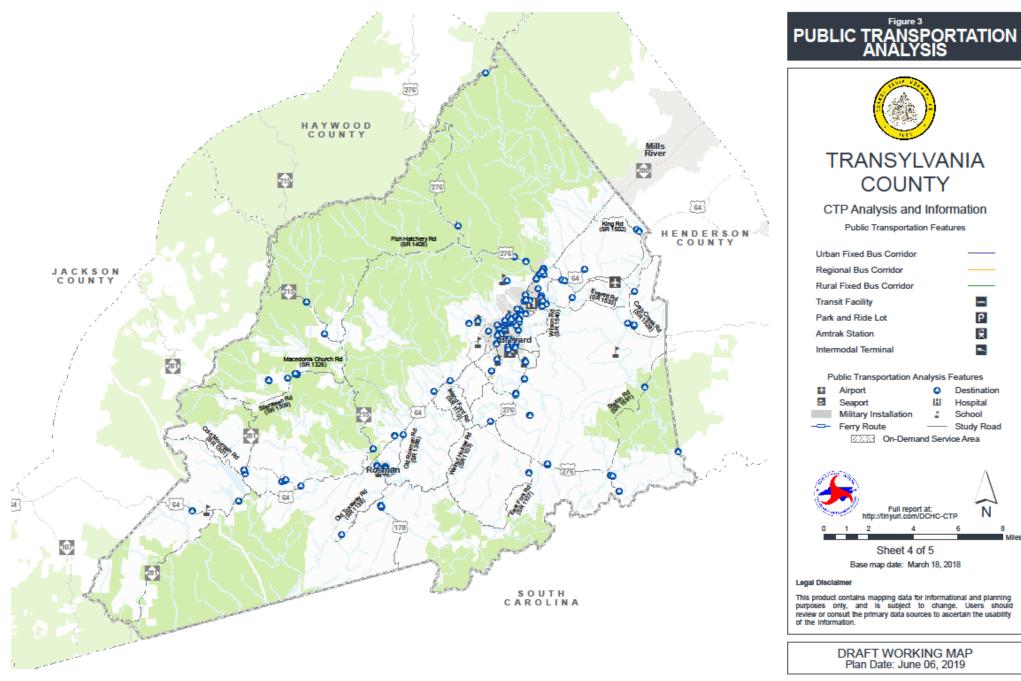
# Transportation

#### **FY 2020 GOALS:**

 Continue preparation of deviated fixed route (stop locations with times, budget analysis and timeline then present to TAB and Board of Commissioners)

A deviated-fixed route service operates a bus or van along a fixed route and keeps to a timetable, but the bus or van can deviate from the route to go to a specific location, such as a house, child care center or employment site. Once the pick-up or drop-off is made, the vehicle goes back to the place along the route that it left.





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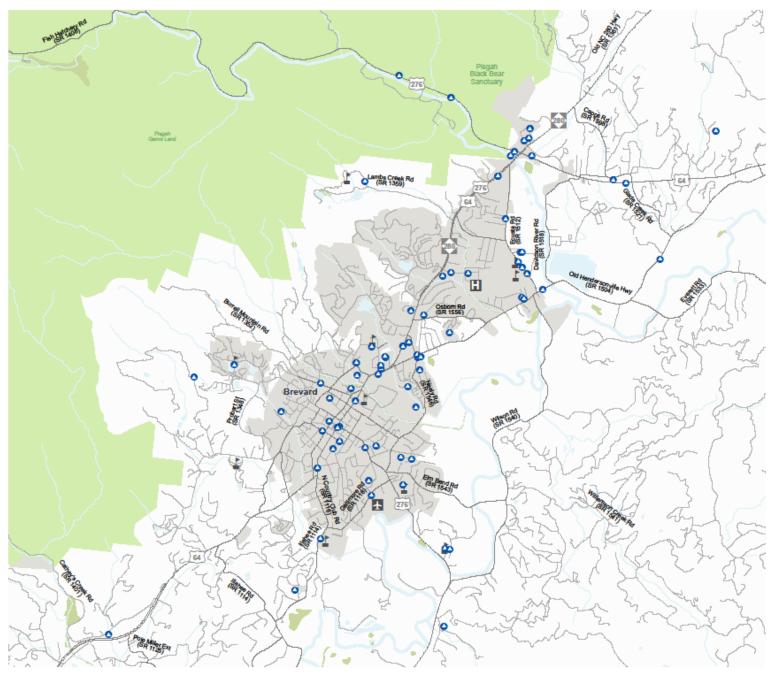
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**5**4.

Destination

--- Study Road

School



# PUBLIC TRANSPORTATION ANALYSIS



## **TRANSYLVANIA** COUNTY

#### CTP Analysis and Information

Public Transportation Features

Urban Fixed Bus Corridor

Regional Bus Corridor

Rural Fixed Bus Corridor

Transit Facility

Park and Ride Lot

Amtrak Station

Intermodal Terminal

#### Public Transportation Analysis Features

Airport

Destination

Seaport

Military Installation

School

Р

**5**4.

-- Ferry Route

--- Study Road

☑☑☑ On-Demand Service Area

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Full report at: http://tinyurl.com/DCHC-CTP

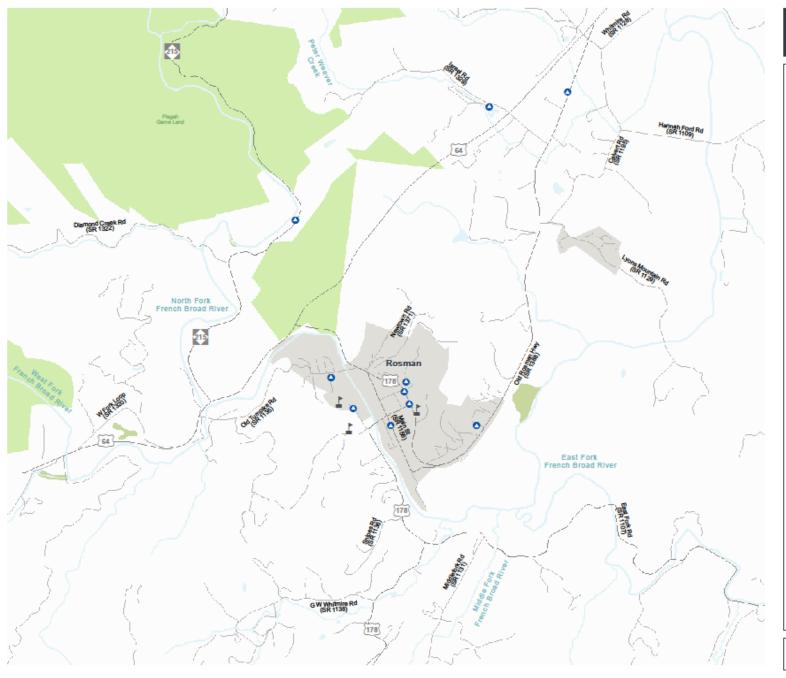
Sheet 4 of 5

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# PUBLIC TRANSPORTATION ANALYSIS



## TRANSYLVANIA COUNTY

#### CTP Analysis and Information

Public Transportation Features

Urban Fixed Bus Corridor

Regional Bus Corridor

Rural Fixed Bus Corridor

Transit Facility

Park and Ride Lot

Amtrak Station

Intermodal Terminal

#### Public Transportation Analysis Features

÷ Airport Destination

t. Seaport Military Installation

School

P

**5**-4

-- Ferry Route

--- Study Road

☑☑☑ On-Demand Service Area



Full report at: http://tinyurl.com/DCHC-CTP

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Sheet 4 of 5

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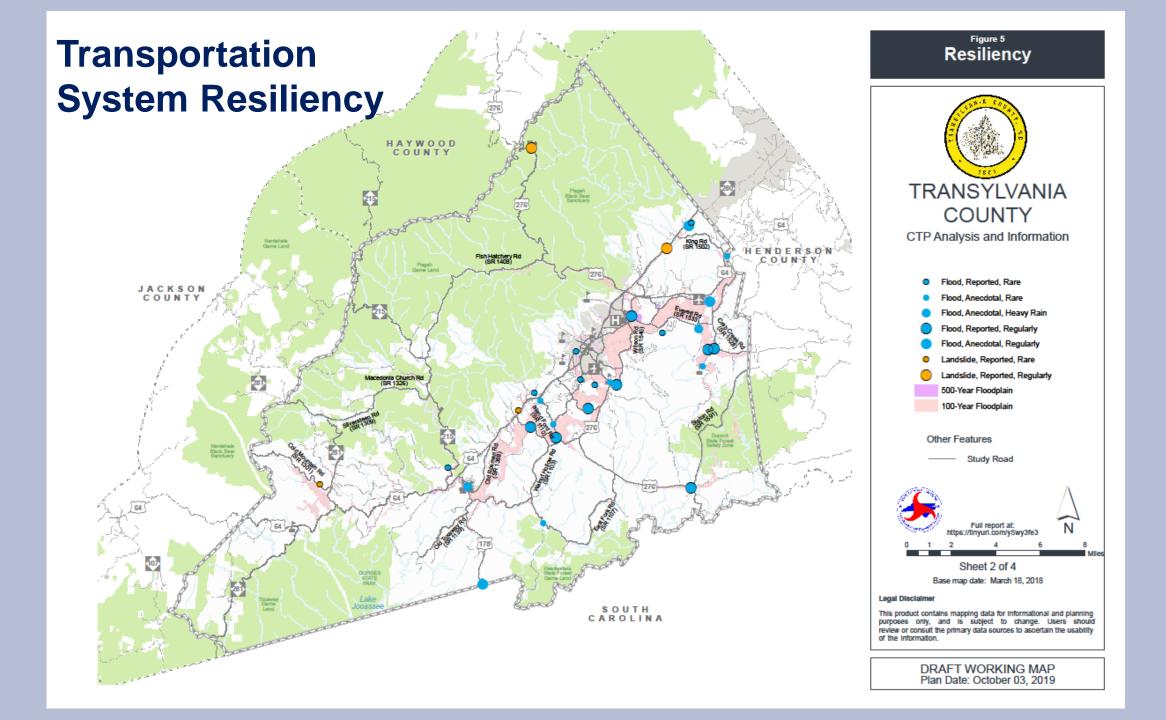
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# Transportation

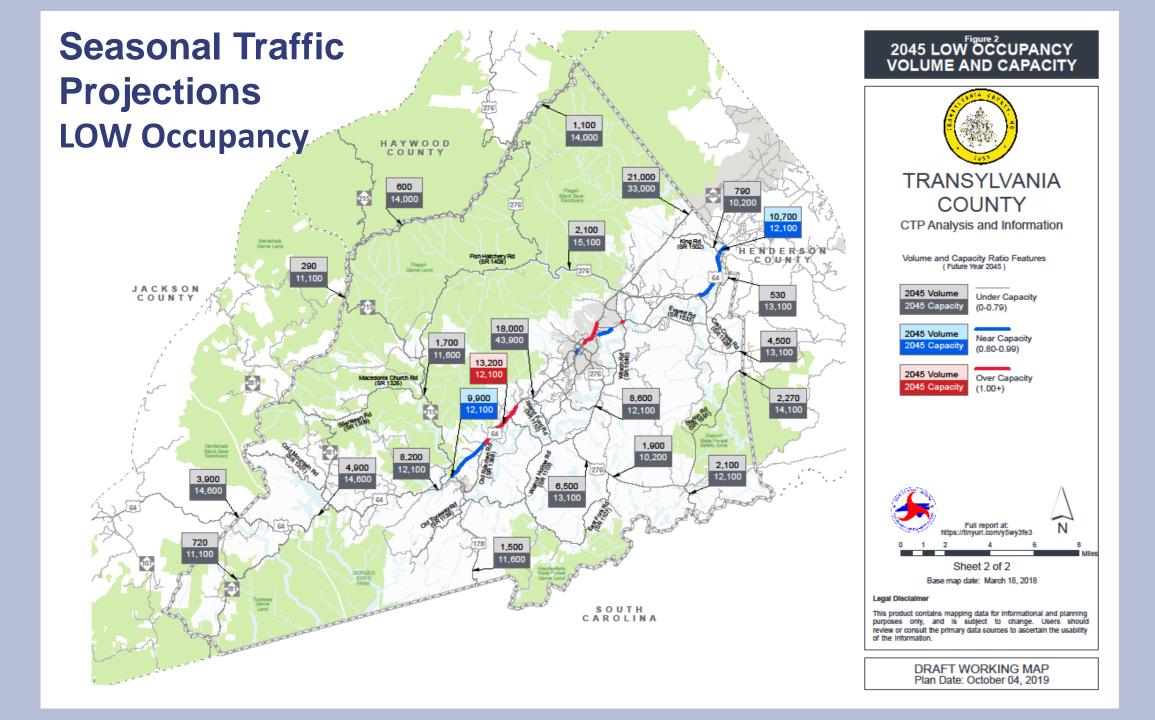
### **Future Goals:**

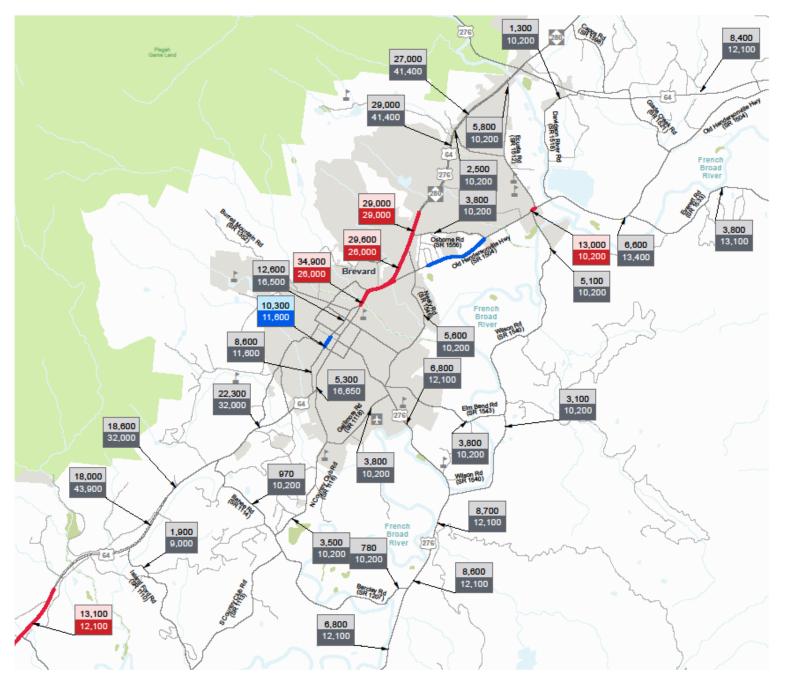
- Expand van service in underserved areas of County
  - □ Going further into rural areas where van transportation is currently unavailable
  - Creating grocery store and shopping trips on designated days during the week
- Connect Van Service with Henderson County and Buncombe County designated transfer locations
- Extend hours of service to cover nights and weekends; Initial steps may begin with Saturday service
- Work with local medical providers and local funding opportunities to help support rural transportation for medical appointments



# Resiliency maps. (Mark-up exercise)

- Large format maps of Resiliency available on tables
- Review maps and identify any gaps or additional areas of concern
- Draw in additional Resiliency concerns (flooding/land and rock slides other resiliency concerns)





# 2045 LOW OCCUPANCY VOLUME AND CAPACITY



## TRANSYLVANIA COUNTY

CTP Analysis and Information

Volume and Capacity Ratio Features (Future Year 2045)

2045 Volume 2045 Capacity

Under Capacity (0-0.79)

2045 Volume 2045 Capacity

Near Capacity (0.80-0.99)

2045 Volume 2045 Capacity

Over Capacity (1.00+)



0.25 0.5

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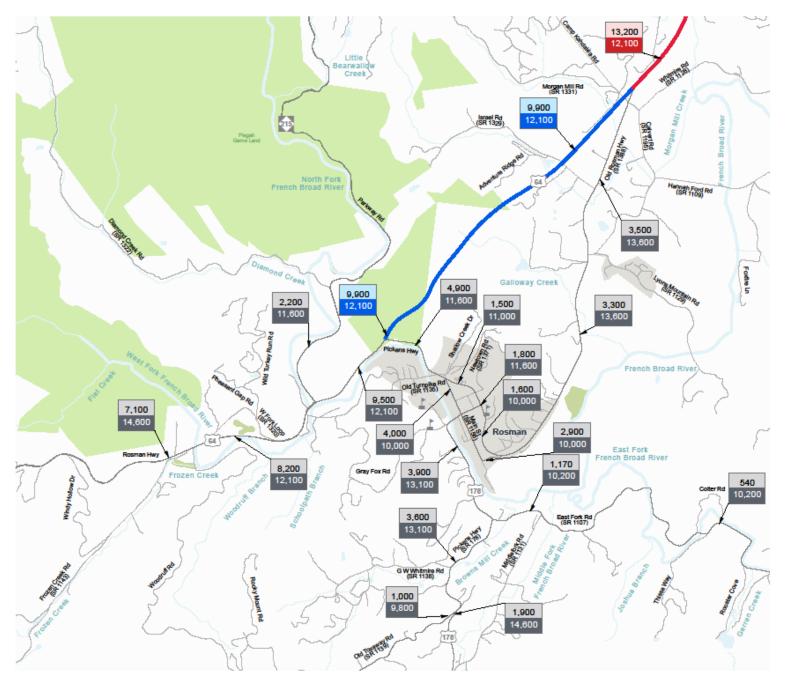
Full report at: https://tinyuri.com/y5wy3fe3 A

Sheet 2 of 2 Base map date: March 18, 2018

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# 2045 LOW OCCUPANCY VOLUME AND CAPACITY



## TRANSYLVANIA COUNTY

CTP Analysis and Information

Volume and Capacity Ratio Features (Future Year 2045)

2045 Volume 2045 Capacity

Under Capacity (0-0.79)

2045 Volume 2045 Capacity

Near Capacity (0.80-0.99)

2045 Volume 2045 Capacity

Over Capacity (1.00+)

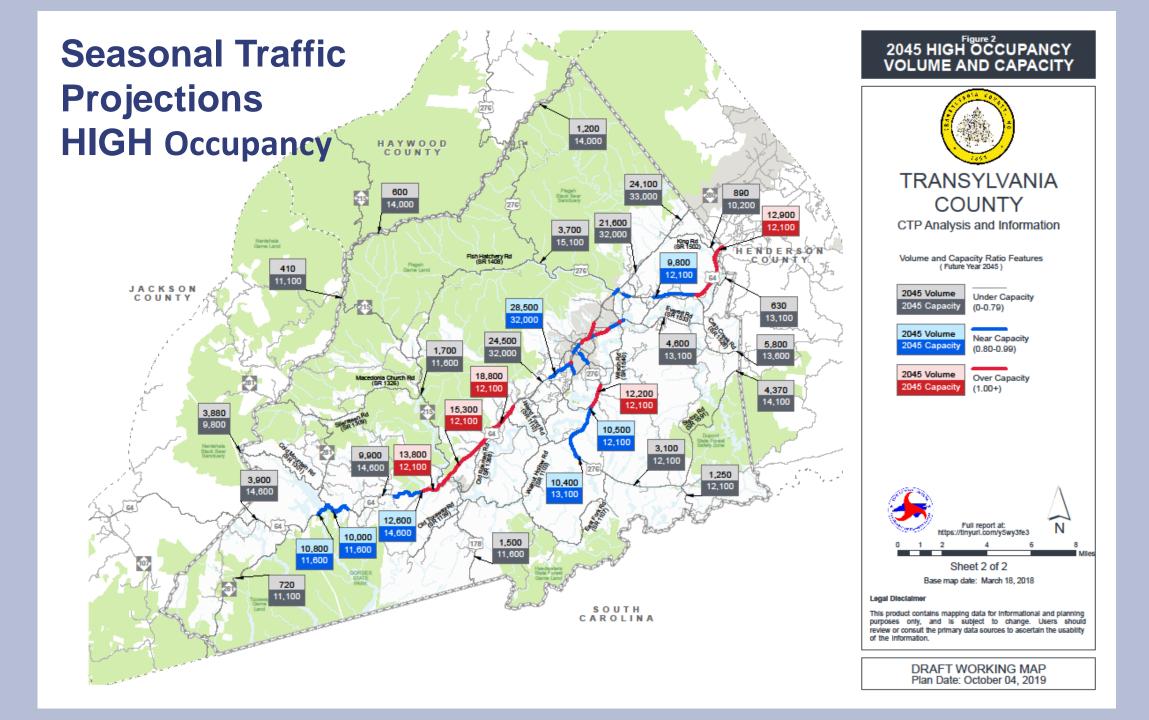


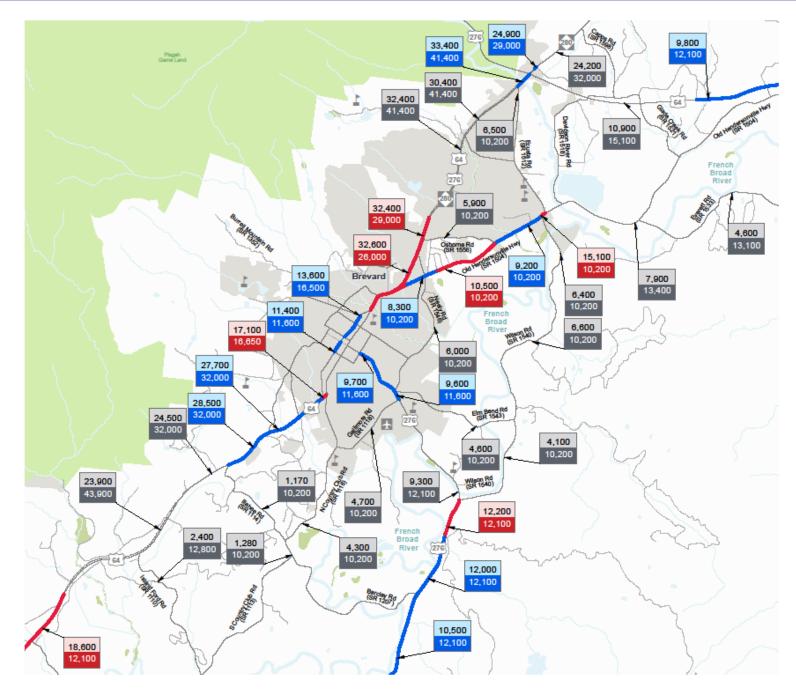
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## 2045 HIGH OCCUPANCY VOLUME AND CAPACITY



## TRANSYLVANIA COUNTY

CTP Analysis and Information

Volume and Capacity Ratio Features (Future Year 2045)

2045 Volume 2045 Capacity

Under Capacity (0-0.79)

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2045 Volume 2045 Capacity

Over Capacity (1.00+)



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Full report at: https://tinyuri.com/y5wy3fe3



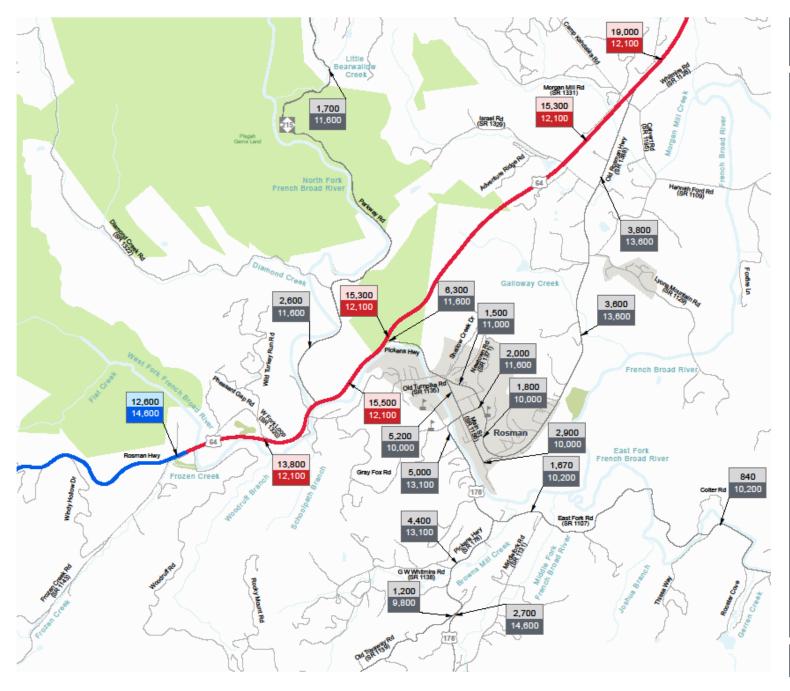
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## 2045 HIGH OCCUPANCY VOLUME AND CAPACITY



## TRANSYLVANIA COUNTY

CTP Analysis and Information

Volume and Capacity Ratio Features (Future Year 2045)

2045 Volume 2045 Capacity

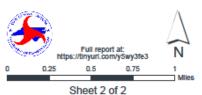
Under Capacity (0-0.79)

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# Modernization, existing and proposes projects, and VC maps. (Mark-up exercise)

- Large format maps of Existing, proposed projects and identified modernization locations and Volume/Capacity available on tables
- Review maps and identify any gaps or additional areas of concern
- Draw in additional needs and place notes on maps explaining

# **Desired Outcomes**

- New Work Group members are up to speed on process and materials.
- Work Group provides direction on deficiencies and advises project team on additional highway needs including resiliency concerns (via mark-up exercise or comments)
- 3. Work Group provides input on Seasonal Traffic Projections
- 4. Future meeting November?

# **Future Meetings**

- Approximately Monthly
- 3:00 PM 4:30 PM
- Next Meeting???
- Board of Elections (unless otherwise noted)

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1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31
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# Contact info for your team

- Vicki Eastland, Land of Sky RPO, vicki.eastland@landofsky.org 828-251-6622
- Daniel Sellers, NCDOT TPD, <u>dcsellers1@ncdot.gov</u> 919-707-0978
- Steve Williams, NCDOT Division 14, sjwilliams@ncdot.gov 828-586-2141
- Troy Williams, NCDOT Division 14, <u>tswilson@ncdot.gov</u> 828-586-2141
- Lonnie Watkins, NCDOT Division 14, <a href="mailto:lnwatknis@ncdot.gov">lnwatknis@ncdot.gov</a> 828-891-7911

